



STANDARD STRAIGHT BAR

BAR SIZE	* LOCATION CATEGORY		
	A	B	C
#4	1'-5"	1'-0"	1'-0"
#5	1'-9"	1'-3"	1'-0"
#6	2'-2"	1'-6"	1'-3"
#7	2'-1"	2'-1"	1'-8"
#8	3'-9"	2'-9"	2'-2"
#9	4'-9"	3'-5"	2'-9"
#10	6'-1"	4'-4"	3'-6"
#11	7'-5"	5'-4"	4'-3"

\* LOCATION CATEGORY:

A- Bars in horizontal layers in top of pour with 12" or more of concrete below them such as in: footings, pier caps, etc.

B- All bars not in Category A spaced less than 6" apart.

C- All bars not in Category A spaced 6" or more apart.

Note:

- When development length is not specified on the Plans, the above dimensions shall be used.
- These development lengths do not apply when bar is in lightweight concrete or any other strength of concrete.
- These development lengths only apply where the General Notes indicate "Reinforcing Steel Design,  $f_s = 24,000$  p.s.i."
- If depth of member does not allow bar development length indicated in Categories A, B, and C; then hook shall be added to all bars not conforming, as per D, E, and F per Std. No. M(6.08)-86-178.

APPROVAL	
<i>E.S. Friedman</i> DIRECTOR	
OFFICE OF STRUCTURES	
DATE: 2/2/90	
REVISIONS	
SHA	FHWA
1-22-01	
9-20-05	
12-4-07	

FHWA APPROVAL  
DATE:

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF STRUCTURES  
DEVELOPMENT LENGTH DIMENSIONS FOR  
GRADE 60 REINFORCING STEEL  
IN MIX NO.3 (3500 P.S.I.) CONCRETE  
NON-EPOXY COATED REINFORCING

STANDARD NO. M(6.14)-90-214

SHEET 1 OF 3